Remarks

Favorable reconsideration of this application, in view of the above amendments and in light of the following remarks and discussion, is respectfully requested.

Claims 14-43 are currently pending in the application; Claims 14 and 16-26 having been amended, and new Claims 27-43 having been added, by way of the present response. Applicants respectfully assert that support for the changes to the claims is self-evident from the originally filed disclosure, including the original claims, and that therefore no new matter has been added.

In the outstanding Office Action the drawings were objected to; a new title was required; Claims 16, 20, 22, 24, and 26 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,476,868 to Kaji et al. (Kaji); Claims 18, 19, 22, and 25 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,690,419 to Silverbrook; and Claims 14, 15, 22, and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Silverbrook in view of U.S. Patent No. 5,245,432 to Jaffray et al. (Jaffray).[1]

As stated above the drawings were objected to because of spelling errors. In response, as shown in the attached replacement sheets, Applicants have corrected the errors noted by the Examiner. Thus, Applicants respectfully request that the objection to the drawings be withdrawn.

As stated above a new title was required. In response, Applicants have amended the title to state "CAMERA APPARATUS AND METHOD OF TAKING PICTURES INCLUDING SIMPLIFIED PROCESSING."

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[1] Although the Office Action states that Claims 14,15, 22, and 23 were rejected under 35 U.S.C. § 103(a) in view of U.S. Patent No. 6,256,423 to Krishnamurthy et al., in view of further statements in the Office Action, Applicants respectfully assert that the rejection is understood as in view of Jaffray.

The present invention is directed to camera apparatuses and method of acquiring an image. Each of independent Claims 14, 16, 18, 20, and 22-26 recites reducing a processing time required for processing less important areas of an image so as to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory.

Specifically, independent Claim 14 recites a number-of-gray-scale-level determining unit configured to allocate area-dependent numbers of gray scale levels to respective areas of an image in response to a determination by an importance computation unit, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory. Independent Claim 16 recites a color interpolation processing unit configured to apply area-dependent color interpolation processing to respective areas of an image in response to a determination by an importance computation unit, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory. Independent Claim 18 recites a sharpness enhancement processing unit configured to apply area-dependent sharpness enhancement processing to respective areas of an image in response to a determination by an importance computation unit, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory. Independent Claim 20 recites a noise removal processing unit configured to apply area-dependent noise removal processing to respective areas of an image in response to a determination by an importance computation unit, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory.

Independent Claim 22 recites an image processing unit configured to perform at least one of assigning area-dependent numbers of gray scale levels to respective areas of an image, applying area-dependent color interpolation processing to the respective areas of the image, applying area-dependent sharpness enhancement processing to the respective areas of the image, and applying area-dependent noise removal processing to the respective areas of the image in response to a determination by an importance computation unit, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory. Independent Claim 23 recites assigning area-dependent numbers of gray scale levels to respective areas of an image in response to determined levels of importance, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory. Independent Claim 24 recites applying area-dependent color interpolation processing to respective areas of an image in response to determined levels of importance, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory. Independent Claim 25 recites applying area-dependent sharpness enhancement processing to respective areas of an image in response to determined levels of importance, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory. Independent Claim 26 recites applying area-dependent noise removal processing to respective areas of an image in response to determined levels of importance, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory.

Kaji is directed to an image pickup apparatus. Applicants respectfully assert that Kaji does not teach, or render obvious, however, the claimed features of reducing a processing time required for processing less important areas of an image so as to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory, as recited in the independent claims. Rather, Applicants respectfully assert that Kaji states that a portion of an image can be enlarged after the image has been stored, but does not show or state that a processing time is reduced for processing less important areas of the enlarged image, so as to reduce a total processing time required for processing an entirety of the enlarged image prior to storage of the enlarged image. In contrast, it appears that the entirety of the enlarged image of Kaji is uniformly processed, after storage of the image.

Thus, Applicants respectfully request that the rejection of independent Claims 16, 20, 22, 24, and 26 under 35 U.S.C. § 102(e) in view of Kaji be withdrawn, and the allowance of independent Claims 16, 20, 24, and 26, as the outstanding grounds of rejection of these claims have been overcome.

Silverbrook is directed to utilizing eye detection methods for image processing. Applicants respectfully assert that Silverbrook does not teach, or render obvious, however, the claimed features of reducing a processing time required for processing less important areas of an image so as to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory, as recited in the independent claims. Rather, Applicants respectfully assert that Silverbrook states that additional information (i.e., artistic renderings) can be applied during image processing in accordance with eye position, after the image has been stored, but does not show or state that a processing time is reduced for processing less important areas of the image, so as to reduce a total processing time required for processing an entirety of the image prior to storage of the image.

Thus, Applicants respectfully request that the rejection of independent Claims 18, 22, and 25 under 35 U.S.C. § 102(e) in view of Silverbrook be withdrawn, and the allowance of independent Claims 18 and 25, as the outstanding grounds of rejection of these claims have been overcome.

With respect to independent Claims 14, 22, and 23, the Office Action relies on Jaffray to remedy the deficiencies of Silverbrook. Applicants respectfully assert that Jaffray does not teach or suggest, however, the claimed features of reducing a processing time required for processing less important areas of an image so as to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory, as recited in the independent claims.

Thus, Applicants respectfully request that the rejections of independent Claims 14, 22, and 23 under 35 U.S.C. § 103(a) be withdrawn, and the allowance of independent Claims 14, 22, and 23, as the outstanding grounds of rejection of these claims have been overcome.

Applicants respectfully assert that Claims 15 and 19 are allowable for the same reasons as the independent claims from which they depend, as well as for their own features. Thus, Applicants respectfully request the allowance of dependent Claims 15 and 19.

Applicants respectfully assert that new Claims 27-43 recite novel and unobvious features. By way of specific non-limiting examples, Applicants respectfully assert that the applied references do not teach or suggest the claimed features of simplifying processing for less important areas of an image compared to more important areas of an image based on comparison of levels of importance, as recited in the claims. Thus, Applicants respectfully request the allowance of new Claims 27-43.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in

20

condition for formal Allowance. A Notice of Allowance for Claims 14-43 is earnestly

solicited.

Should the Examiner deem that any further action is necessary to place this

application in even better form for allowance, the Examiner is encouraged to contact the

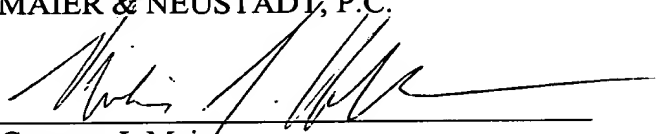undersigned representative at the below listed telephone number.

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Respectfully submitted,

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